

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/12873

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ G09F13/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ G09F13/16

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Toroku Koho 1996-2004
 Kokai Jitsuyo Shinan Koho 1971-2004 Toroku Jitsuyo Shinan Koho 1994-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	US 5621571 A (Minnesota Mining and Manufacturing Co.), 15 April, 1997 (15.04.97), Column 5, line 16 to column 7, line 4; column 10, lines 40 to 61; Figs. 1 to 13 & JP 9-508983 A Page 11, line 26 to page 14, line 23; page 20, lines 11 to 23; Figs. 1 to 13 & WO 9522132 A1 & EP 825579 A1	1-13 14-36
Y	JP 2001-151313 A (Toppan Printing Co., Ltd.), 05 June, 2001 (05.06.01), Column 6, line 41 to column 7, line 22; column 8, lines 5 to 8; Fig. 4 (Family: none)	14-15

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
05 February, 2004 (05.02.04)Date of mailing of the international search report
17 February, 2004 (17.02.04)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

INTERNATIONAL SEARCH REPORT

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PCT/JP03/12873

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6441551 B1 (3M Innovative Properties Co.), 27 August, 2002 (27.08.02), Column 11, line 45 to column 12, line 22; Fig. 4 & JP 11-38918 A Column 12, lines 5 to 40; Fig. 4 & WO 9904604 A1 & EP 998836 A1	16-36
A	JP 8-43615 A (Nippon Carbide Industries Co., Ltd.), 16 February, 1996 (16.02.96), Column 5, lines 13 to 15; Fig. 1 (Family: none)	9
A	WO 96/35196 A1 (MINNESOTA MINING AND MANUFACTURING CO.), 07 November, 1996 (07.11.96), Page 7, lines 19 to 24 & JP 11-504456 A Page 12, lines 19 to 24 & EP 826202 A	13
A	Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 77631/1988 (Laid-open No. 181083/1989) (Nitto Jushi Kogyo Kabushiki Kaisha, Refllite Kabushiki Kaisha), 27 December, 1989 (27.12.89), Page 7, line 15 to page 8, line 8; Fig. 7 (Family: none)	16-36
A	JP 2001-33609 A (Nippon Carbide Industries Co., Ltd.), 09 February, 2001 (09.02.01), Column 12, lines 8 to 12 (Family: none)	22,33

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Box I Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Claims 1-3 relate to a recursive-reflection display device in which the position where a communication antenna is formed is specified.

Claims 4-13 relate to a recursive-reflection display device in which the recursive-reflection element is specified.

Claims 14-15 relate to recursive-reflection display device having two or more radio recognition devices.

Claims 16-18 relate to a recursive-reflection display device in which the position where a communication antenna is formed is specified and an illumination device is arranged at the back of the recursive-reflection layer.

(Continued to extra sheet)

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest ☐ The additional search fees were accompanied by the applicant's protest.

☒ No protest accompanied the payment of additional search fees.

Continuation of Box No. II of continuation of first sheet(1)

Claims 19-25 relate to a recursive-reflection display device in which the recursive-reflection element is specified and an illumination device is arranged on the back of the recursive-reflection layer.

Claim 26 relate to a recursive-reflection display device in which configuration of an illumination device is specified and the illumination device is arranged at the back of the recursive-reflection layer.

Claims 27-29 relate to a recursive-reflection display device in which the position where a communication antenna is formed is specified and an illumination device using the electroluminescence principle is arranged at the back of the recursive-reflection layer.

Claims 30-36 relate to a recursive-reflection display device in which the recursive-reflection element is specified and an illumination device using the electroluminescence principle is arranged at the back of the recursive-reflection layer.